Impact of the Presence of Foreign Missions on Trade: Evidence from Turkey

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by

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ABSTRACT

This paper analyzes the impact of presence of foreign missions on trade using Turkey's unique expansion in its foreign mission network (37 new embassies in 8 years) as the source of variation in a dynamic panel data setting. The dependent variable is the trade between Turkey and 186 countries from 2006 to 2014. The results indicate that presence of an embassy increases export value by 27% and this increase comes mainly from volume effect. Categorizing goods by the Rauch (1999) classification shows that increase in differentiated goods exports explains almost all of the change in total export value. There is no statistically significant impact on the exports of homogeneous goods. Replication of the analysis for imports suggests that presence of an embassy leads to 70% increase in imports and this increase is entirely driven by the homogeneous goods imports.

1 Introduction

Growth in global import demand from developed countries has declined in recent years. The share of the EU-28 countries in the global imports of goods declined from 18.1% to 14.6% between 2004 and 2014, similarly share of the United States declined from 21.6% to 15.8% during the same period (European Commission, EU trade in the world). Such a significant decline in the relative share of the high income countries has encouraged exporting countries to discover new markets. However, uncertainty arising from the information asymmetry is one of the major trade barriers in new destinations most of which are developing countries. Language barrier, bureaucratic procedures, security concerns all contribute to the sunk cost a firm has to take into account when entering into a new market. Thanks to the improvements in information and transportation technologies, those asymmetries across trade partners have declined over time. Nevertheless, countries still continue to increase the number of their highly costly foreign missions mainly to support economic relations with those countries as well as to maintain the consular affairs or political interests (Rose, 2007). This study aims to estimate if there is a causal relationship between the presence of an embassy and international trade using the significant variation in Turkey's foreign network in recent years (37 new embassies between 2006 and 2014).

More specifically, the goal is to analyze the exports (imports) from Turkey to 186 countries in a strongly balanced panel of 9 years from 2006 to 2014 to answer the following questions: Does existence of an embassy impact exports to (imports from) that country? Does this effect vary across differentiated vs non-differentiated products? And, if there is an impact on exports (imports), what are the roles of the extensive margin (variety effect) and intensive margin (volume effect)?

A dynamic panel difference-in-differences strategy is followed by introducing the presence of an embassy as an additional control variable to the augmented gravity equation. The country

specific time trend is also added as an additional control variable in order to deal with the possible pre-existing export (import) growth trends. Estimation results in this study suggest that presence of an embassy increases exports (imports) to that country by 27% (70%). While the increase in exports is mainly accounted by the increase in the exports of differentiated goods, the increase in imports is driven by the homogenous goods imports. For both exports and imports, increase in the trade is explained by the volume effect (intensive margin). Results are found to be robust to the various specifications and adjustments in the sample size. Even though the results indicate an improvement in trade as a result of the opening of new embassies, a simple cost-benefit analysis shows that short run export returns by itself are not enough to compensate the expenditure needed to maintain those foreign missions.

The paper will proceed with a short literature review and background information in the following two sections. Section four describes the empirical estimation strategy, section five represents the results and robustness checks, and the last section conclude with a short policy evaluation and concluding remarks.

2 Previous studies

There exist only few studies that examine the causal relationship between the costly foreign missions and bilateral trade values across the countries. Among those, Rose (2007) is one of the most relevant to the research question in this study. Rose carries out a cross-sectional analysis of the annual average bilateral trade over the period of 2002-2003 from 22 large source countries to 200 destinations in the world. Since the cross-sectional analysis does not control for the country-pair fixed effects, he uses a wide range of control variables. He deals with the reverse causality by instrumenting the presence of foreign missions with several control variables including oil reserve capacity and desirability of destination country. Even though the validity of these instruments is a

question, as those instruments are very likely to be correlated with trade volume, Rose still finds positive and statistically significant embassy effect on exports (6-10%).

Segura-Cayuela and Vilarrubia (2008b) also investigate the trade impact of foreign missions through a cross-sectional bilateral trade analysis and following a similar method to Rose (2007). However, authors focus on the source of impact by considering the extensive and intensive margins of the causal effect. They find that presence of a foreign service increases exports around 11 to 18% and this increase is originating from the extensive margin channel.

Afman and Maurel (2010) perform a panel data analysis by using the new foreign mission openings in the Eastern Europe after the dissolution of Soviet Block. They specifically focus on the pair wise trade between 26 OECD countries and 30 transition countries in three observation periods 1995, 2000, and 2005, excluding the within group trade. The resulting impact is positive and high in magnitude (around 40%); however, its statistical significance disappears when controlled for the pair and time fixed effects.

Head and Ries (2009) carry out a single country analysis by investigating the impact of the Canadian trade missions on the exports of Canada. Having a panel of before and after treatment periods, authors run regressions for various treatment time spans (1-4 years). They handle the reverse causality by controlling unobserved characteristics with fixed effects and including the lag of the dependent variable among the control variables. The study finds no statistically significant effect on Canadian exports.

Another single country analysis by Creusen and Lejour (2011) looks at the determinants of the entry decision of new exporter firms using the international trade transactions of Dutch firms between 2002 and 2008. They find a stronger effect such that the presence of foreign missions stimulates both the entry decision and volume of trade by 5-20%. Adjustment process revealed by

the data confirms that some firms exit after the first trial as a result of the realized sink costs. Those who find to stay profitable in the new market increase their trade volume overtime.

Finally, a meta-analysis by Bergeijk and Moons (2013) compares the 29 empirical studies on trade and investment impact of economic diplomacy, which contains embassies, consulates and other diplomatic facilities, investment and export promotion offices, trade and state visits. They conclude that primary studies conducted on a single country basis will in general show a lower significance of the coefficient while studies using embassies as a proxy for economic diplomacy tend to produce higher t-values.

3 Background and motivation

Turkey has experienced a significant change in its foreign policy objectives since the beginning of the 21th century. The main goal of this change was to develop a multi-dimensional and more proactive foreign policy which in part led to the expansion of relations with long-time neglected Sub-Saharan Africa, Latin America and Asia-Pacific regions. As a result of this expansion policy, Turkey opened 37 new foreign embassies in the aforementioned regions between 2006 and 2014. Table 1 shows the list of those countries and Figure 1 represents the change in the total number of Turkish embassies over time. Such an aggressive expansion in the number of foreign missions in a short time period is very unique as it requires a substantial increase in human capital and monetary expenses. Figure 2 illustrates the total expenses of the Turkish Foreign Ministry in the last decade. In parallel to the establishment of new foreign embassies, we observe a sharp increase in the expenses, which approximately correspond to an annual 250 million dollars additional cost (about %30 increase).

There may be other factors that are contributing to this jump; however, it is obvious that the increase in the number of new embassies has a major role. The government motivates and

rationalizes this increase in expenditures by emphasizing the expected returns from the larger export opportunities in addition to the advanced relations with the countries in which a new embassy opened. Thus, this study aims to estimate whether the new embassies have impacted trade positively by employing an augmented gravity model regression analysis.

There exists only a handful of attempts to specifically investigate the impact of the presence of highly costly embassies most likely due to the lack of enough variation over time in data. Hence, the majority of existing empirical studies use cross-sectional bilateral trade data. As usual, the results from a cross-sectional analysis are very likely to be biased from not controlling time invariant and country specific characteristics and simultaneity between the size of trade and presence of foreign missions. Accordingly, the addition of 37 new embassies to the Turkish foreign mission network in a very short time period is unique and allows me to employ a panel data analysis, which can efficiently take care of the mentioned concerns.

Furthermore, a literature research indicates that there is no study that investigates the impact of foreign missions from an emerging country perspective. As a transition country from being a developing country to a developed country, example of Turkey may provide an insight for other developing countries that need to allocate their already limited sources efficiently across various policy options.

4 Empirical strategy

I followed a dynamic panel data estimation method by augmenting the standard gravity model with the inclusion of lagged dependent variables and embassy dummy as additional control variables.

4.1 Estimating equation:

Following is the estimating equation for the embassy impact:

$$lnY_{it} = \alpha E_{it} + \delta lnY_{it-1} + \beta W_{it} + \rho_i T + \gamma_t + \mu_i + +\varepsilon_{it} \qquad (1)$$

where lnY_{it} is the natural logarithm of export (import) value or the number of export varieties from Turkey to country i at time t, E_{it} is the indicator of the presence of a Turkish embassy in country i at time t, W_{it} is a vector of constant term and time variant explanatory variables including log GDP, presence of consulates, free trade agreement (FTA), availability of direct flights, total imports (excluding Turkey) of country i, and a measure of conflict in country i, ρ_i provides effect of country specific time trend (T), $\gamma_t \; and \; \mu_i$ are time and country-specific fixed effects, and ε_{it} is the unobserved error term.

The key parameter in this equation is α and represents the percentage change in the outcome variable due to presence of an embassy. Though most of the variation occurs between 2008 and 2014, the observation period is extended back to 2006 to have enough pretreatment observations. Aim of doing so is to control for the pre-existing trend in outcome variable. Inclusion of the country specific time trends as regressors is expected to address a possible simultaneity between the growth rate of exports and the embassy opening decision.

4.2 Data and summary statistics

The export and import data is constructed using the Comtrade international trade database at 4 digit SITC version 2 code level. The trade value and variety data is further categorized as homogenous goods versus differentiated goods using the 2007 version of Rauch (1999) classification of goods. Annual GDP values are obtained from the UNstats database. Historical data for the timeline of the presence of embassies and consulates and information on the regulatory

process are confidentially obtained from the Prime Minister's Office in Turkey. Information on the other types of foreign missions and the historical direct flights are formed by making use of the historical annual reports of the related organizations.

Table 2 represents the mean or total values of various outcome variables and control variables before and after the treatment period for the treatment and control countries. The treatment countries are the ones in which a new Turkish embassy is opened between 2008 and 2014. The remaning countries are taken as the control group but represented in two sub-groups; the first group of control countries are those that never had a Turkish embassy and the second group of control countries are the ones that already had an embassy before 2008.

Evidence from the simple log mean comparison suggests that exports to the treatment countries perform much better than the exports to the control countries. Differential increase seems to be larger in the exports of differentiated goods, which are expected to be more responsive to a reduction in information asymmetry. Furthermore, the differential change is mainly arising from the increase in the number of varieties, which is another sign for the positive impact of embassies in introducing new exporters to those markets. However, descriptive evidence also shows a differential increase in the GDPs of the treatment countries relative to the other countries. Thus, a causal relationship between the increase in exports to the treatment countries and the presence of embassies can only be explained by a further analysis that takes in account the other factors as well.

Among other time variant factors, changes in the presence of development agencies,[1] availability of direct flights, and presence of a free trade agreement are also included as additional

[1] These agencies provide direct assistance to some developing countries and manages aid projects by the Turkish government.

control variables. As shown on the summary table, there was significant increase in the number of development agencies and direct flight availability during the observation period.

5 Results

5.1 Export Results

Table 3 represents the regression results of various specifications when the natural logarithm of exports from Turkey to partner countries is run on the embassy indicator and other control variables. All specifications include the country and time fixed effects. The preferred specification is the column (4), which controls for the lagged dependent variable and country specific time trend. This specification is preferred because controlling for the country specific time trend hopefully takes care of the pre-existing trend and the simultaneity bias. Increase in the R-square (almost doubles) with inclusion of country specific time trends supports the validity of these concerns. Column (5) controls for the imports from the rest of the world as a proxy for time varying country specific factors that may be driving the results. This specification is not preferred as it leads to significant decline in the sample size. However, it is included in the results table as a robustness check. Similarly, column (6) represents the results from an Arellano-Bond GMM estimation and is also included as a robustness check to the preferred specification. Arellano-Bond estimator deals with the dynamic panel bias that is likely to arise in a dynamic model as the inclusion of the lagged variable violates the randomness of the error term. However; when the observation period is longer, the dynamic panel bias becomes relatively insignificant and the Arellano-Bond estimator can lead to misleading results due to the increased number of instruments. (Roodman, 2009). Therefore, it is run to be a comparison to the baseline method.

The coefficient on the key variable, embassy, is statistically significant and positive in all specifications. The preferred specification in column (4) suggests that the presence of an embassy

in the partner country increases exports to that country by almost 27%. This result is robust to the addition of the country specific time variant controls (column 5) and Aralleno-Bond GMM estimator in column (6).

Table 4 presents the regression results when exports are categorized as differentiated versus homogenous goods according to the Rauch (1999) classification. The first row shows the results from the entire exports and the second and third rows show the results from the differentiated and homogenous goods exports respectively. Again, column (4) is the preferred specification. As expected, differentiated goods exports significantly increase with a similar magnitude (34%) to the overall increase whereas the increase in the homogenous goods exports is not statistically significant.

Next, I carried out a simple decomposition exercise to investigate if the change in exports is arising from the variety effect (extensive margin) or volume effect (intensive margin).[2] Table 5 shows the results the regressions when the outcome variable is replaced with the total number of export varieties at SITC version 2, 4-digit level, which will give the share of extensive margin share of the export increase. Surprisingly, the preferred specification in column (4) indicates that the presence of an embassy has no statistically significant impact on the overall number of export varieties as well as the variety of differentiated goods. These results imply that the increase in the export value is because of the volume effect not the variety effect; however, one would expect the opposite to happen since the presence of an embassy reduces the information asymmetry for new

[2] Let $X = \sum_{i=1}^{n} v_i$, where X is the total export value and v_i is the export value (price*quantity) of variety i. We can rewrite the export equation as: $X = \bar{v}n$. Taking the natural logarithms of both side we get: $\log(X) = \log(\bar{v}) + \log(n)$. Differentiating both side and assuming no change in export prices we finally obtain: $\frac{\Delta X}{X} = \frac{\Delta \bar{v}}{\bar{v}} + \frac{\Delta n}{n}$. Hence, the change in total export value will be the sum of the change in average export volume and total number of export variety.

entrants. This unexpected result may be result of the missing values at the disaggregate level due to confidentiality concerns. [3]

5.2 Robustness Checks

Table 7 and Table 8 represent the results of various robustness checks for changes in the observation period and the sample of countries respectively. The results are pretty robust to the adjustments in the time span as shown on Table 7. The preferred specification is estimated for the total value of exports and number of varieties with different groups of countries in Table 8. Firstly, the high income countries are dropped from the original sample, secondly those with very small population, thirdly those that had an embassy prior to 2008, and finally those never had an embassy as of 2014. All of these sub-samples generate very close estimates to the original model for both the total value of exports and the total number of varieties.

5.3 Import results

New Turkish embassies in the partner country help to reduce the information asymmetry not only for Turkish exporters but also for importers and exporters from the partner country. Moreover, most of the countries did also open their embassies in Turkey simultaneously or in the following years.

Table 9 represents the results for the imports based on the preferred specification in export estimation. Embassy impact is large in magnitude and statistically significant at 10 percent level. Accordingly, presence of an embassy leads to 70% increase in total import value. Disaggregation

[3] Most of the treatment countries are small or lower middle income countries therefore the volume of exports (also the number of exporting firms) at the disaggregated level is very small. Thus, it is very likely that the export values for most of the newly introduced industries are not reported by the reporter country due to firm confidentiality concerns. Indeed, reported total export value is higher than the sum of the disaggregated export values for most countries.

by the characteristics of the imported goods (columns 2-3) suggests that this increase is due to the substantial increase in the homogenous goods imports (140% increase) whereas the impact on the differentiated goods imports is not statistically significant. When compared with export results in the previous section, we can argue that the trade between Turkey and the countries with new embassy improved a lot such that Turkey sold more of differentiated goods in exchange with homogenous goods from the partner countries.

Columns 4 through 6 in Table 9 show the embassy impact on the total number of import varieties. There is no significant impact on varieties. This implies that the increase in the total value of imports is arising from the intensive margin effect. But, again this result must be taken carefully as the issue of unreported varieties (due to low number of importing firms) may be downsizing the variety effect here as well.

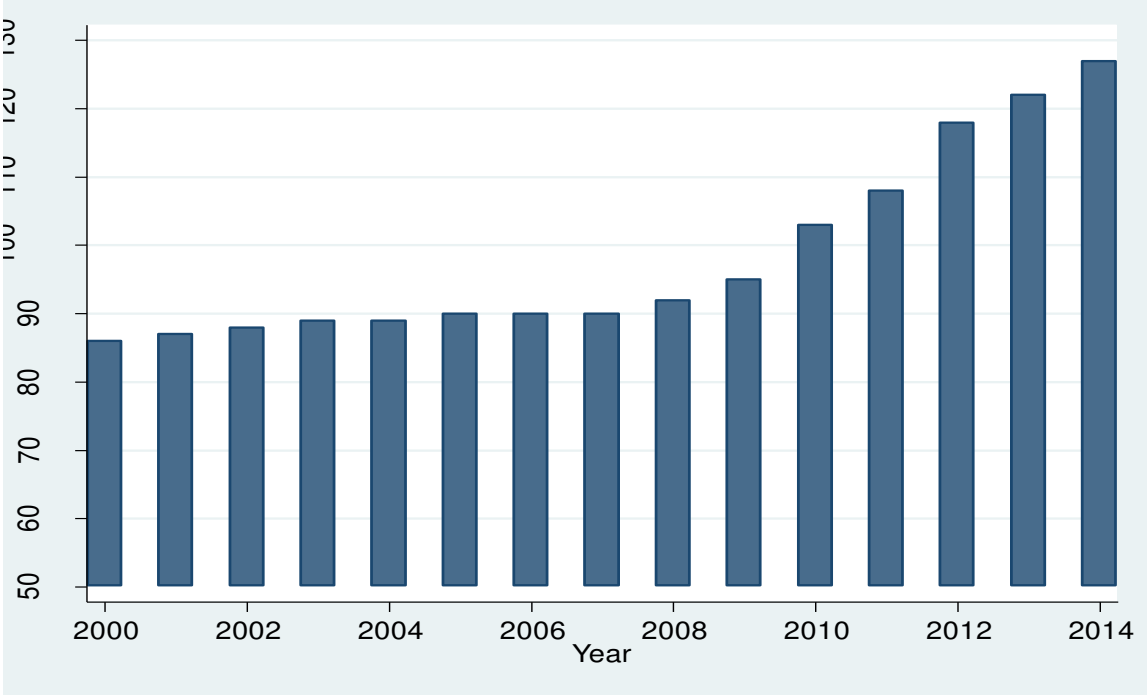
5.4 Cost-Benefit Analysis

The results indicate an improvement in trade as a result of the opening of new embassies. However, in order to have an idea about the overall economic impact, we need to account for the expected total changes in the export value due to the presence of embassies. In 2008, the year right before the treatment, total export value to 37 treatment countries was about 3 billion dollars. Taking 2008 as the base year, 27% increase in exports corresponds to approximately 800 million dollars increase in annual exports as a result of the embassy impact. Considering more than 200 million dollars increase in annual spending on foreign missions partially due to the new embassies, the short run export returns by itself seem not enough to compensate the substantial expenditure needed to maintain those foreign missions. However, it has to be also noted that export returns may be higher in the long run as the availability of consular affairs enhances the mobility across countries.

6 Conclusion

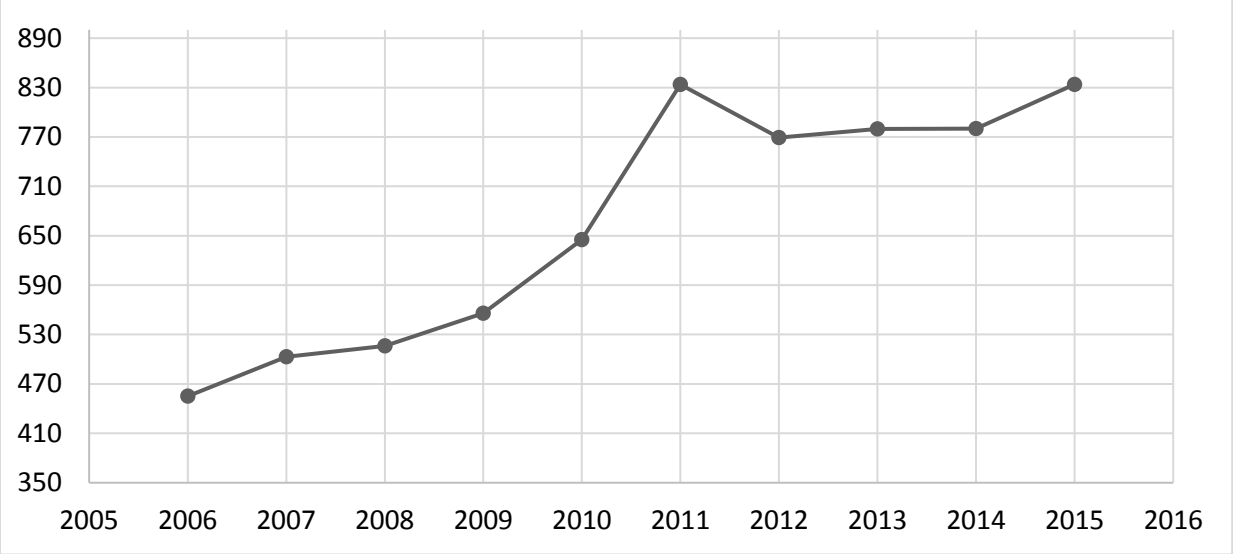
This study analyzes the short term trade impact of the presence of foreign missions by using the significant variation in Turkey's foreign mission network in recent years. As oppose to the existing cross-sectional estimations, this study employed a dynamic panel difference-in-differences strategy thanks to the size of the variation in a short time period. After controlling for the country specific time trends and standard gravity covariates, it is found that the presence of an embassy increases exports by 27% and imports by 70%. Increase in the level of exports is due to the increase in differentiated goods exports whereas the increase in imports is entirely driven by the homogenous goods exports. In both trade measures, volume (intensive margin) effects play the major role. Considering over 200 million dollars increase in annual expenses on foreign missions, 27% increase in exports is moderate in monetary terms and corresponds to an only 800 million dollar increase in exports.

Figure 1: Total Number of Turkish Foreign Embassies Overtime



Source: General Directorate for Laws and Decrees, Prime Minister's Office

Figure 2: Annual expenses of the Turkish Foreign Ministry (Million$)



Source: General Directorate of Budget and Fiscal Control, http://www.bumko.gov.tr/

Table 1: List of the Countries with New Embassies

Angola	Sri Lanka
Benin	Madagascar
Burkina Faso	Mali
Brunei Darussalam	Malta
Botswana	Myanmar
Ivory Coast	Montenegro
Cameroon	Mozambique
Congo	Mauritania
Colombia	Namibia
Costa Rica	Niger
Djibouti	Panama
Dominican Rep.	Peru
Ecuador	Rwanda
Eritrea	Chad
Gabon	Tanzania
Ghana	Uganda
Guinea	Zambia
Gambia	Zimbabwe
Cambodia	

Table 2: Summary Statistics

	Treatment Countries (N=37)			Never had an embassy (N=58)			Had embassy before 2008 (N=90)		
VARIABLES	2008	2014	Change	2008	2014	Change	2008	2014	Change
Log exports	16.8	17.8	**1.0**	15.2	15.6	**0.4**	20.0	20.3	**0.2**
Log exports (differentiated)	15.3	16.5	**1.2**	14.0	14.0	**0.0**	18.9	19.3	**0.4**
Log exports (non-dif)	14.8	15.9	**1.1**	10.8	11.9	**1.1**	18.2	18.5	**0.2**
Log variety	4.4	5.4	**0.9**	3.2	3.7	**0.5**	6.1	6.3	**0.2**
Log variety (differentiated)	4.2	5.2	**1.0**	3.0	3.5	**0.5**	5.8	6.0	**0.2**
Log variety (non-dif)	2.7	3.5	**0.8**	1.6	2.1	**0.4**	4.5	4.8	**0.2**
Free trade agreement (sum)	0	0	**0**	1	2	**1**	10	14	**4**
Development agency (sum)	0	6	**6**	0	0	**0**	14	23	**9**
Direct flight (sum)	1	15	**14**	0	3	**3**	66	79	**13**
Log GDP	23.3	23.7	**0.4**	22.1	22.3	**0.2**	25.7	25.9	**0.2**

Table 3: Embassy Impact on the Log of exports

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Arellano-Bond**
Embassy	0.436***	0.313***	0.341***	0.271**	0.295***	0.236**
	(0.124)	(0.0955)	(0.0918)	(0.108)	(0.0868)	(0.118)
Log gdp	0.979***	0.686***	0.718***	0.831***	0.786**	3.841**
	(0.241)	(0.210)	(0.203)	(0.199)	(0.330)	(1.700)
Dependent var lag 1 exports		0.256***	0.234***	-0.0630	-0.125	0.0808
		(0.0611)	(0.0534)	(0.0644)	(0.0934)	(0.127)
Dependent var lag 2 exports			-0.0175			
			(0.0694)			
Log import from others					0.220	
					(0.211)	
Constant	-6.293	-3.523	-3.388	-1.828	-6.950	
	(5.701)	(4.718)	(4.672)	(4.673)	(5.918)	
Observations	1,674	1,488	1,302	1,488	1,181	1,302
R-squared	0.366	0.337	0.280	0.535	0.553	
Number of id	186	186	186	186	167	186
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country Sp. Time Trend				Yes	Yes	Yes
Hansen p-value						0
AR-1 p-value						1.03e-06
AR-2 p-value						0.0301

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1. The other control variables in the regressions are

Table 4: Embassy Impact on the Log of Exports by Differentiated vs Homogenous Goods

DEPENDENT VARIABLE	(1) Fixed Effects	(2) Fixed Effects	(3) Fixed Effects	(4) Fixed Effects	(5) Fixed Effects	(6) Arellano-Bond
Log of all exports	0.436***	0.313***	0.341***	0.271**	0.295***	0.236**
	(0.124)	(0.0955)	(0.0918)	(0.108)	(0.0868)	(0.118)
Log of differentiated exports	0.487***	0.388***	0.445***	0.340***	0.222***	0.206*
	(0.129)	(0.111)	(0.109)	(0.113)	(0.0851)	(0.112)
Log of homogenous exports	0.550	0.318	0.325	0.172	0.516**	0.144
	(0.340)	(0.215)	(0.210)	(0.247)	(0.249)	(0.200)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country Sp. Time Trend				Yes	Yes	Yes
Import from other countries and other controls					Yes	

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1

Table 5: Embassy Impact on the Log Number of Export Industries at 4 Digit SITC2

VARIABLES	(1) Fixed Effects	(2) Fixed Effects	(3) Fixed Effects	(4) Fixed Effects	(5) Fixed Effects	(6) Arellano-Bond
Embassy	0.356***	0.221***	0.224***	0.0510	0.0733**	0.0831
	(0.0939)	(0.0492)	(0.0486)	(0.0436)	(0.0362)	(0.0513)
Log gdp	0.223	0.209*	0.236*	0.269***	0.109	-0.955
	(0.156)	(0.112)	(0.133)	(0.0917)	(0.117)	(0.896)
Dependent var lag 1 exports		0.382***	0.302***	-0.0376	-0.109	0.253***
		(0.0667)	(0.0654)	(0.0503)	(0.0779)	(0.0758)
Dependent var lag 2 exports			0.0354			
			(0.0497)			
Log import from others					0.0852	
					(0.0848)	
Constant	-0.825	-2.173	-2.577	-0.520	1.989	
	(3.658)	(2.458)	(2.879)	(2.222)	(2.357)	
Observations	1,674	1,488	1,302	1,488	1,181	1,302
R-squared	0.343	0.427	0.363	0.634	0.642	
Number of id	186	186	186	186	167	186
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country Sp. Time Trend				Yes	Yes	Yes
Hansen p-value						0.914
AR-1 p-value						8.54e-06
AR-2 p-value						0.0820

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1

Table 6: Embassy Impact on the Log Number of Exports by Differentiated vs Homogenous Goods

	(1)	(2)	(3)	(4)	(5)	(6)
DEPENDENT VARIABLE	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Arellano-Bond**
Log # of all exports	0.356***	0.221***	0.224***	0.0510	0.0733**	0.0831
	(0.0939)	(0.0492)	(0.0486)	(0.0436)	(0.0362)	(0.0513)
Log # of differentiated exports	0.345***	0.218***	0.219***	0.0463	0.0629*	0.0712
	(0.0916)	(0.0503)	(0.0494)	(0.0430)	(0.0331)	(0.0485)
Log # of homogenous exports	0.442***	0.294***	0.300***	0.0892	0.136*	0.115
	(0.0964)	(0.0622)	(0.0644)	(0.0625)	(0.0735)	(0.0802)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country Sp. Time Trend				Yes	Yes	Yes
Import from other countries and other controls					Yes	

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1

Table 7: Robustness Check for the Embassy Impact with Various Time Spans

	(1)	(2)	(3)	(4)	(5)	(6)
DEPENDENT VARIABLE: Ln of all exports	**Random Effects**	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Fixed Effects**	**Arellano-Bond**
Original model: 2006-14	0.436***	0.313***	0.341***	0.271**	0.295***	0.236**
	(0.124)	(0.0955)	(0.0918)	(0.108)	(0.0868)	(0.118)
Longer period: 2005-14	0.486***	0.351***	0.328***	0.232**	0.277***	0.151
	(0.128)	(0.0984)	(0.0909)	(0.109)	(0.105)	(0.122)
Shorter period: 2007-14	0.401***	0.342***	0.369***	0.196*	0.243**	0.236
	(0.117)	(0.0931)	(0.104)	(0.118)	(0.103)	(0.145)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country Sp. Time Trend				Yes	Yes	Yes
Import from other countries and other controls					Yes	

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1

Table 8: Robustness Check for the Embassy Impact with Various Country Samples

	Dependent Variable	
	(1)	(2)
SAMPLES:	**Log of all exports**	**Log variety # of all exports**
Original model: all countries	0.271**	0.714
	(0.108)	(0.454)
High Income countries excluded(>$10,000) (114 countries)	0.275**	0.0498
	(0.115)	(0.0498)
Small countries excluded (<0.5m) (160 countries)	0.257**	0.0532
	(0.109)	(0.0463)
Countries with no embassy as of 2006 (95 countries)	0.298**	0.0578
	(0.115)	(0.0459)
Countries currently have an embassy (126 countries)	0.258**	0.0461
	(0.110)	(0.0449)
Country FE	Yes	Yes
Time FE	Yes	Yes
Time Trend (Country specific)	Yes	Yes

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1

Table 9: Embassy Impact on Imports

	Total Import Value			Number of Import Varieties		
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	All	Differentiated	Homogenous	All	Differentiated	Homogenous
Embassy	0.706*	-0.154	1.399**	0.0289	-0.0489	0.0768
	(0.394)	(0.656)	(0.670)	(0.0951)	(0.131)	(0.0611)
Log gdp	1.040	1.244	1.161	0.145	0.121	0.113
	(0.672)	(0.825)	(0.829)	(0.175)	(0.203)	(0.134)
Lagged Dep Var.	-0.193***	-0.131**	-0.161**	-0.107**	-0.0729	-0.0718
	(0.0533)	(0.0540)	(0.0629)	(0.0445)	(0.0454)	(0.0458)
Constant	-9.562	-16.34	-6.784	0.0770	0.807	-0.120
	(15.92)	(19.66)	(19.57)	(4.185)	(4.804)	(3.191)
Observations	1,488	1,488	1,488	1,488	1,488	1,488
R-squared	0.336	0.304	0.368	0.367	0.308	0.388
Number of id	186	186	186	186	186	186
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country spec. TT	Yes	Yes	Yes	Yes	Yes	Yes

Note: Clustered standard errors by country in parenthesis *** p<0.01, ** p<0.05, * p<0.1

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